

U.S. EPA REGION V POLLUTION REPORT

I. HEADING

Date:

February 23, 2000

Subject:

Industrial Highway/Gary Municipal Airport Oil Release Site,

Gary, Lake County, Indiana

From:

Steve Faryan, U.S. EPA On-Scene Coordinator, Region 5

To:

POLREP:

10 - (Reporting period 4/1/00 through 2/23/01)

II. BACKGROUND

CERCLIS ID No: IND067469437

Site No: Z590 FPN: 098022

IAG No: RW69947898-01-0

ID No: 99HR05F50203D Start Date: 4/7/99 Completion Date: N/A USGS Hydro Unit: 04040001 Task Order No: 9801-05-025

Response Authority: OPA Fund-lead

NPL Status: N/A

State Notification: IDEM Mobilization Date: 4/8/99 Action Memo Status: N/A

III. SITE DESCRIPTION

A. Incident Category: Response to Oil Release-OPA Funded

B. Site Location: Gary, Lake County, Indiana

LAT: 41°37'13" North; LONG: 87°25'14" West

1. Site Description:

The site is a drainage ditch located along the western boundary of the Gary/Chicago Municipal Airport in Gary, Indiana, which has been impacted by migrating oil and oil-contaminated groundwater. Previous POLREPs contain additional details on the site, the source of the pollutants and the downstream areas that may be affected by discharge from the ditch.

2. Description of threat:

Petroleum-contaminated discharge from the ditch may impact downstream receptors, which include a wetland area and the Grand Calumet River. Additional details can be found in previous POLREPs.

C. Preliminary Assessment

The release hazard was initially documented in U.S. EPA site assessment reports prepared in 1992. A pump and treat groundwater system, including an oil and water separator, was installed to address the contamination. However, the system was shut down in 1995, and was not reactivated until 1999. Additional details are contained in the previous site POLREPs.

IV. RESPONSE INFORMATION

A. Situation

Refer to POLREP #1 (dated 4/12/99), POLREP #2 (dated 5/12/99), POLREP #3 (dated 6/14/99), POLREP #4 (dated 10/13/99), POLREP #5 (dated 11/10/99), POLREP #6 (dated 12/10/99), POLREP #7 (dated 1/7/00) and POLREP #8(dated 2/4/00) and POLREP #9 (dated 4/00) for details of the response actions conducted from 4/7/99 to 4/00.

1. Current situation and status of response actions:

From 4/1/00 through 2/23/01, removal activities performed at the Industrial Highway Site included the ongoing evaluation and continued operation of the upgraded product recovery system.

A product recovery system is operational at the Industrial Highway Site to recover oil-contaminated groundwater. The primary system components are four recovery sumps which are connected to horizontal collection pipes, a 10 inch recovery well which are pumped to a treatment building containing an oil/water separator unit. The treated water is pumped up-gradient and discharged into an infiltration gallery. Through 2/23/01, a total of 6,500,000 gallons of oil-contaminated groundwater have been treated since the reactivation of the system on 9/24/99. Between 3/31/00 to 2/23/01, approximately 4,029,0000 gallons of contaminated groundwater has been captured by the product

recovery system and treated. From 3/31/00 to 2/23/01 a total of 8,713 gallons of oil was collected and shipped off site for fuels blending/incineration. Since the re-start of the system a total of approximately 15,700 gallons of oil has been recovered and shipped off site to Beaver Oil Company, Inc. for reuse in blended fuel product.

From April 2000 to present the U.S. EPA, Environmental Response Team has assisted the OSC in conducting a groundwater study of the area to determine the oil location, thickness and to detect potential sources. As a part of this study the following wells, piezometers and maps were prepared.

- 33 Piezometers installed and monitored
- 12 Monitoring Wells installed and monitored
- 10 inch diameter recovery well installed on Gary/Chicago Airport property
- Oil layer was monitored and pump tests conducted on recovery well(Map Prepared)
- An interim report by ERT was prepared along with maps showing oil depths in two large plumes with thickness layers of 2 feet of oil in one plume and 3.28 feet in another plume.
- The floating layer was sampled in November of 2000 and characterized as a mixture of crude oil, heating oil and diesel fuel. All of the components were weathered products indicating the oil was from historical spills.
- Interim report was written by the U.S. EPA Environmental Response Team recommending the installation of 4-6 10inch recovery wells on the West Side of the railroad tracks to recover the 2-3 feet of floating product documented in this area.

B. Planned Removal Actions

The currently planned future removal actions are as follows:

- 1. Modify the existing date and cost ceiling on the Interagency agreement between the U.S. EPA and the U.S. C.G. to allow for the operation the product recovery system
- 2. Continue gross oil recovery from seeps to the ditch as necessary with sorbent boom and pads.
- 3. When the IAG amendment is approved, begin the next phase of the recovery system.
- 4. Install 4-6 10 inch recovery wells as per ERT's recommendations. The wells will be installed on the West side of the tracks and will be spaced approximately 150 feet from each other. A new treatment plant will have to be constructed on the West side of the tracks to handle this additional volume of water and oil. Preliminary design and cost estimates are being prepared. Provide Operation and Maintenance of the system to prevent discharge of product to the ditch and Grand Calumet River.
- 5. Continue to pursue sources of the oil and Potential Responsible Parties.

C. Key Issues

Negotiations have been completed by U.S. EPA, the PRP group for the adjacent Conservation Chemical Site and representatives of the Gary Chicago Airport to install a culvert along the length of the drainage ditch. The intent of installing an appropriately engineered culvert, is to isolate surface water flowing to the Grand Calumet River from oil which may continue to seep and migrate into the existing drainage ditch.

It should be noted that installation of the ditch culvert would not replace continued operation of the pump and treat system. U.S. EPA believes that without continued system operation, oil could still migrate to and impact the Grand Calumet River and surrounding wetland environment.

V. COSTS (through 4/1/00)

| | <u>CEILING</u> | AMOUNT USED | |
|------------------|----------------|-------------|--|
| ERRS Contractor | \$ 740,000 | \$ 679,571 | |
| START Contractor | \$ 46,000 | \$ 40,000 | |
| U.S. EPA | TBD | | |

^{*} The above accounting of expenditures is an estimate based on amounts known by the OSC at the time of preparation of this report. The cost accounting data shown in this report does not necessarily represent the exact monetary figures which the U.S. Government may include in any claim for cost recovery.

VI. DISPOSITION OF WASTES

| <u>Material</u> | Quantity | Disposal Facility | Dates Shipped |
|--------------------------|----------------|-------------------|---------------|
| Non-Haz, Special Waste, | 4,4000 tons | Republic Landfill | 10/99-Present |
| Oil from Recovery System | 15,700 gallons | Beaver Oil | 10/99-Present |